

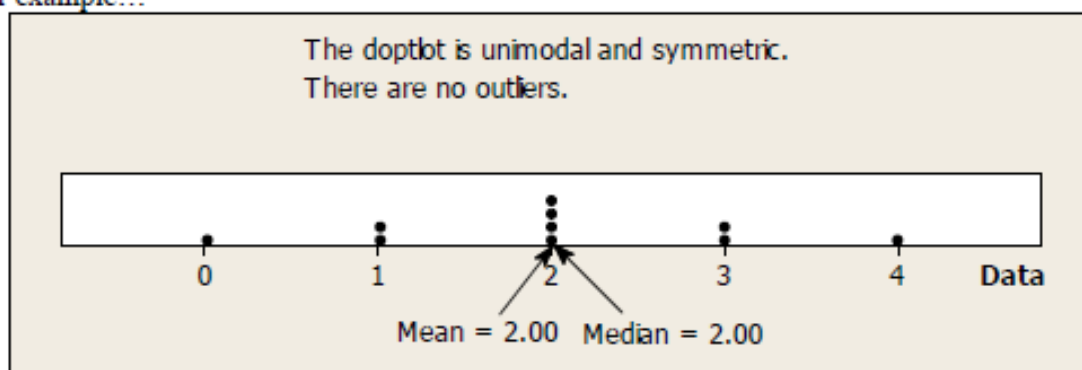
Introduction to Statistics and Data Analysis

Measures of Typical Value (Center)

Part I. For each data set given below, do the following:

- Construct a dotplot of the data.
- Describe the shape of the dotplot.
- Compute the mean and mark its place on the number line of your dotplot.
- Compute the median and mark its place on the number line of your dotplot.

For example...



Data Set #1: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Data Set #2: 1, 1, 1, 2, 3, 8, 9, 10, 10, 10

Data Set #3: 0, 0, 0, 0, 0, 1, 1, 1, 2, 3

Data Set #4: 0, 17, 18, 18, 19, 19, 19, 19, 20, 20

Part II. Answer each of the following questions...

- A. When are the mean and the median equal?
- B. When is the mean greater than the median?
- C. When is the mean less than the median?
- D. When is a “typical” value of the data set best represented by the mean?
By the median?